

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCY United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	Fl	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/606,942	10/606,942 06/27/2003		Yousuke Minoura	2018-739	4462	
23117	7590	07/27/2004		EXA	EXAMINER	
NIXON &	VANDEI	RHYE, PC	GIMIE, N	GIMIE, MAHMOUD		
1100 N GLE	BE ROAI	D				
8TH FLOOR				ART UNIT	PAPER NUMBER	
ARLINGTON, VA 22201-4714				3747		

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	*						
		Application No.	Applicant(s)				
		10/606,942	MINOURA ET AL.				
Office Action Summary		Examiner	Art Unit				
		Mahmoud Gimie	3747				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address				
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. a period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 27 Ju	ine 2003					
2a)□	• • • • • • • • • • • • • • • • • • • •	·					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□ 8)□	Claim(s) <u>1-10</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed. Claim(s) <u>1-10</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.					
Applicati	ion Papers						
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>27 June 2003</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Examine	\square accepted or b) \square objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority ι	ınder 35 U.S.C. § 119						
a)l	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau See the attached detailed Office action for a list of	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachmen	t(s) e of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)				
2) 🔲 Notic 3) 🔯 Inforr	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date 07/23/2004.	Paper No(s)/Mail Da					

Application/Control Number: 10/606,942

Art Unit: 3747

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: line 15, the word "continuously" seems inaccurate as the injector locking portion (52) does not appear to continuously surround the fuel injector locking portion. Line 20, the word "should" appears inaccurate as it casts doubt on the claimed function. It is suggested that an alternative word such as "will" or the like be used.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- 3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Satou (6,374,809).

Satou discloses a fuel supply unit for an engine including at least one cylinder, the fuel supply unit comprising: a fuel injector for injecting fuel into the cylinder, the fuel injector including a fuel inlet port (6) and a lockable injector portion (groove); fuel distribution pipe (D) for distributing fuel to the injector, the fuel distribution pipe including a fuel outlet port (16) communicated with the fuel inlet port (6) of the injector so that the fuel is supplied from the fuel distribution pipe to the fuel injector through the fuel outlet port and

Art Unit: 3747

the fuel inlet port; and a detachment preventing means (20) for preventing the fuel injector from detaching from the distribution pipe, the detachment prevention means including an injector locking portion (22), which [substantially] continuously extends around the fuel injector within a circumferential length of the fuel injector, wherein the detachment preventing means (20) is locked in the fuel outlet port (16), and a circumferential middle portion of the of the fuel injector locking portion (22) locks the lockable injector portion (groove) of the fuel injector so that the fuel inlet port (6) should [will] not be detached from the fuel outlet port when the fuel injector is the shifted in a detaching direction thereof.

With regard to claim 2, wherein the lockable injector portion (groove) is formed in a circumferential surface of the fuel injector and projects in a radial direction thereof.

With regard to claim 3, wherein the injector locking portion fit on a circumferential surface of the fuel injector, so that a diametrical shift of the fuel injector is restricted.

With regard to claim 4, the detachment preventing means includes two distribution pipe locking portions (21), each of which extends from a corresponding one of side portions (21) of the injector locking portion (20) toward the fuel outlet port (16), and which are disposed so the injector is intervenient between the distribution pipe locking portions; and each of the distribution pipe locking portion is locked in a circumference of the fuel outlet port in a diametrical direction thereof, so that the distribution pipe locking portions are locked in the fuel outlet port.

With regard to claims 5-10, see above and figures 1-7 of Satou.

Art Unit: 3747

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show fuel injector mounting means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 703-305-1037. The examiner can normally be reached on Tuesday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 703-308-1946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MG

MAHMOUD'GIMIE
PRIMARY PATER TYAMINER
ART UNIT 3:4/